MULTIMEDIA UNIVERSITY

STUDENT IDENTIFICATION NO

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |

# MULTIMEDIA UNIVERSITY

# FINAL EXAMINATION

**TRIMESTER 2, 2019/2020**

## BFN2104 – CORPORATE FINANCE

(All Sections / Groups)

9 MARCH 2020
9.00 a.m. – 11.00 a.m.
(2 Hours)

---

**INSTRUCTION TO STUDENT**

1. This Question paper consists of 3 pages with **FOUR (4)** Questions only. (Including Front Page)

2. Answer **ALL** questions.

3. Write your answers in the Answer Booklet provided.

## QUESTION 1 (20 Marks)

a) Elway has a target debt-equity ratio of 1.20. Its WACC is 10.78%, and the tax rate is 40%. If Elway's cost of equity is 16%, what is its pretax cost of debt? (12 marks)

b) Discuss the differences between debt securities and equity securities. (8 marks)

## QUESTION 2 (24 Marks)

Jenny Rene, the CFO of Asor Products, Inc., has just completed an evaluation of a proposed capital expenditure for equipment that would expand the firm's manufacturing capacity. Using the traditional NPV methodology, she found the project unacceptable because

$NPV_{traditional}$ = -RM1,700 < $0

Before recommending rejection of the proposed project, she has decided to assess whether there might be real options embedded in the firm's cash flows. Her evaluation uncovered three real options:

- Option 1: Abandonment—The project could be abandoned at the end of 3 years, resulting in an addition to NPV of RM1,200.
- Option 2: Growth—If the projected outcomes occurred, an opportunity to expand the firm's product offerings further would become available at the end of 4 years. Exercise of this option is estimated to add RM3,000 to the project's NPV.
- Option 3: Timing—Certain phases of the proposed project could be delayed if market and competitive conditions caused the firm's forecast revenues to develop more slowly than planned. Such a delay in implementation at that point has an NPV of RM10,000.

a) Based on the above three real options available, what is the real option's overall expected value if there was a 25% probability that the abandonment option would need to be exercised, a 30% probability that the growth option would be exercised, and finally a 10% probability that the timing option would need to be exercised? (10 marks)

b) Based on your answer in part a), compute the strategic NPV of the proposed project with option. (6 marks)

c) Should Jenny recommend to management with regard to the proposed equipment expenditure? (4 marks)

d) In general, how does the above demonstrate the importance of considering real options when making capital budgeting decisions? (4 marks)

**Continued...**

## QUESTION 3 (32 Marks)

Critically assess the reasons behind mergers and acquisitions and their welfare implications.

## QUESTION 4 (24 Marks)

a) Mark Lee, CEO of the Gencana Corporation, is evaluating his firm's capital structure. Gencana is currently unlevered and it is able to generate free cash flow to the firm of RM1,000,000 each year. The CEO expects that if Gencana permanently increases its debt to RM10 million, the combined financial distress and agency costs associated with the debt will reduce the yearly free cash flow to the firm to RM800,000. Assume that the required return for Gencana is 16% regardless of whether the firm is levered or unlevered and the corporate tax rate is 35%.

i. Calculate the value of Gencana when it is unlevered. (4 marks)
ii. Calculate the value of Gencana when it is levered (10 marks)
iii. Calculate the added value of Gencana's debt. (4 marks)

b) Distinguish between operating cycle (OC) and cash conversion cycle (CCC) (6 marks)

**End of Page**